

## YACHT ROD™

### *The High Performance Spring-Loaded Mechanical Boom Vang*

Precision design in three sizes. Excellent vang/boom support for performance cruising and racing. White powder coated aluminum & polished stainless steel. Supplied with spectra cable ready to add your tackle system. Your 4:1 equals 8:1 when installed on **Yacht Rod™**. Can be led to small winch for additional power. Spring return holds boom. Brackets for mast and boom sold separately. Mast and boom fittings are listed below. **Caution: Oversheeting or leaning heavily on aft end of boom can bend the boom or the Yacht Rod™. The main halyard shackle should be snapped to the outboard boom end, in port, to prevent damage to the Yacht Rod™.**



#### FEATURES:

- *Eliminates need for boom topping lift*
- *Supports boom in light air and when reefing and lowering the mainsail*
- *Faster than hydraulics – No messy hydraulics to leak*
- *More efficient than conventional tackles*
- *Tubing is white coated anodized 6061-T6 aluminum and electropolished 316 stainless steel*
- *Precision machined 6061-T6 aluminum clevis ends, sheaves and Nylatron® bearings*
- *Precipitation hardened stainless steel spring with fast-pin adjustment — rated for over 1 million compressions*
- *No gas spring to lose its charge*



**CUSTOM OEM  
VANGS AVAILABLE**



**“FOR RACING OR CRUISING”**

**Note of Caution:** Furling booms weigh as much as 3 times the weight of standard booms. Standard vang spring will not support their weight.

## YACHT ROD™ MAST & BOOM FITTINGS

	YR-M	YR-L	YR-XL
Stroke	7"	11-1/2"	11-1/2"
Adjustable Length			
Pin to Pin (min.)	58 1/2"	66 1/2"	79 1/2"
Pin to Pin (max.)	70 1/2"	80"	93"
Adjustable distance	12"	13-1/2"	13-1/2"
Pin Size	1/2"	5/8"	5/8"
Jaw Width	3/8"	11/16"	11/16"
Weight	9.8 lbs	17 lbs	19 lbs
Max. Return Force	600 lbs	1450 lbs	1450 lbs



YR-M Mast Fitting



YR-M Boom Fitting

Part No.	Model No./Description:
352003	Boom fitting for YR-M
352103	Boom fitting for YR-L & YR-XL
352005	Mast fitting for YR-M
352104	Mast fitting for YR-L & YR-XL
352007	Harken 8:1 Tackle YR-M
352130	Harken 8:1 Tackle YR-L
352131	Harken 8:1 Tackle YR-XL

Part No.	Model No./Description:
352000	YR Medium Yacht Rod for boats 34-40'
352100	YR Large Yacht Rod for boats 41-45'
352101	YR X-Large Yacht Rod for boats 46-55'

### YR-L & XLG Mast Fitting



### YR-L & XLG Boom Fitting



Part No.	Package	Max. LOA	Includes
352050	1	40	YR-M Vang YR-M Boom Fitting YR-M Mast Fitting Harken Blocks & Tackle
352160	2	45	YR-LG Vang YR-LG Boom Fitting YR-LG Mast Fitting Harken Blocks & Tackle
352165	3	55	YR-XLG Vang YR-XLG Boom Fitting YR-XLG Mast Fitting Harken Blocks & Tackle



## TECH. TIPS - ABOUT YACHT RODS / BOOM VANGS

Forespar® makes three sizes of spring loaded boom vang for boats starting around 30 feet and up to about 55 feet. These units are rugged, a good value, and have many thousands of ocean miles under hundreds of boats all over the world. We do not offer the most purchase or have any "locks" or fancy stuff. These are work horses designed to do the job on a general cruising boat or club racer. They will work very effectively if installed correctly and not abused.

Some basic points to remember:

The boom must be fixed, non-rotating and non-sliding on the mast. Roller booms or sliding goosenecks will not work with any rigid vang. The boom fitting or the upper vang head will fail if the boom can roll.

The minimum angle from the boom should not be less than 30 deg. and no more than 45 deg. Lesser or greater angles increase the compressive load beyond what a spring-loaded vang can handle. Hydraulics is the only answer beyond these angles.

Yacht Rods do not "lift" the boom. Only hydraulics can do that. These do take the place of a topping lift. They will hold the boom up while dropping sails or reefing. Properly set up, they will keep the boom level when the main is furled.

Do not attempt using a standard spring-loaded vang with an in-boom furling system. These furling units are far heavier than a standard boom and these vangs are not suited for this type of boom.

The "stroke" is the total maximum compressed travel of the spring/piston. Once the spring bottoms out, the unit will fail if further compressive force is applied.

We offer a minimum of 7" on the medium Yacht Rod and 11-1/2" on the large and extra large units. This should be

plenty of travel. If, on an average 40' cruiser, they need to "vang" the main down more than 7", the sail is cut wrong!

We make mast and boom brackets to fit our ends. We require that they be used. They must handle a tremendous compression force and still articulate in line with the boom. They are every bit as critical as the booms gooseneck. The boom fitting must fit snugly to the vang end and "spread" the load on the boom. This fitting sees compression and tension. The boom attachment must be capable of handling these forces without kinking the boom. A lot of race boats loose their booms due to failure at the vang fitting.

Rigid vangs can rattle, squeak, or make other noises under sail. They all do to some degree. We cannot guarantee ours will be completely quiet, but from the hundreds of installations in the field, we are not hearing of any major noise problems. Do not oil these! The oil will simply flow out and end up on deck. Keep them clean by flushing with fresh water periodically. No other maintenance should be needed other than watching for worn line, dents or bends. Do not use a unit that has been damaged or over-compressed. Common care should keep the Yacht Rod working for many years and nautical miles.

### SIZING YACHT ROD BOOM VANGS

Choosing the correct size rigid vang requires the following information:

Distance from mast fitting to boom fitting at the proper angle from the boom per the previous spec sheet. This will tell you what length requirements you have for using the "pin to pin" dimensions on the Yacht Rod size chart. Note that it is possible to have a low boom on a large boat that makes this dimension inaccurate. Be sure to check angle and length. Be sure you do not have any obstructions (hatches, vents,

cabin tops) in the way of the Yacht Rod's arc of movement. Remember that it will need clearance through 180 degrees of movement from side to side.

Check above dimensions against the catalog's boat size recommendations. If you are close to the maximum, you may need to go up a size to support your boom and sails weight at rest. (Furled) Do not undersize!

Install mast fitting as low as possible on aft centerline of mast.

Install boom fitting to get proper angle per previous specs sheet. You may want to clamp the boom fitting in place first, before you drill any holes; to be sure it is in the correct position. This way, you can ease the weight of the boom and furled main sail onto the unit to find out how much the spring will be compressed at rest.

Adjust the cross pin as needed being sure the spring is between the pin and the inner piston tube. Do not set the pin through the spring!

Whenever the sail is furled, it is best to set the main halyard to the outboard end of the boom to support the booms weight. In this way, the Yacht Rod spring will not take a "set" from being compressed the whole time the boat is not in use.

Basic sizing:

34-40 feet- Yacht Rod Medium #352000 or package #352050  
41-45 feet- Yacht Rod Large #352100 or package #352160  
46-55 feet- Yacht Rod Extra-Large #352101 or package #352165  
Packages include the mast and boom brackets and tackle.